

(No Model.)

C. H. NICHOLS.

CRACKER SCREEN.

No. 282,465.

Patented July 31, 1883.

Fig. 1.

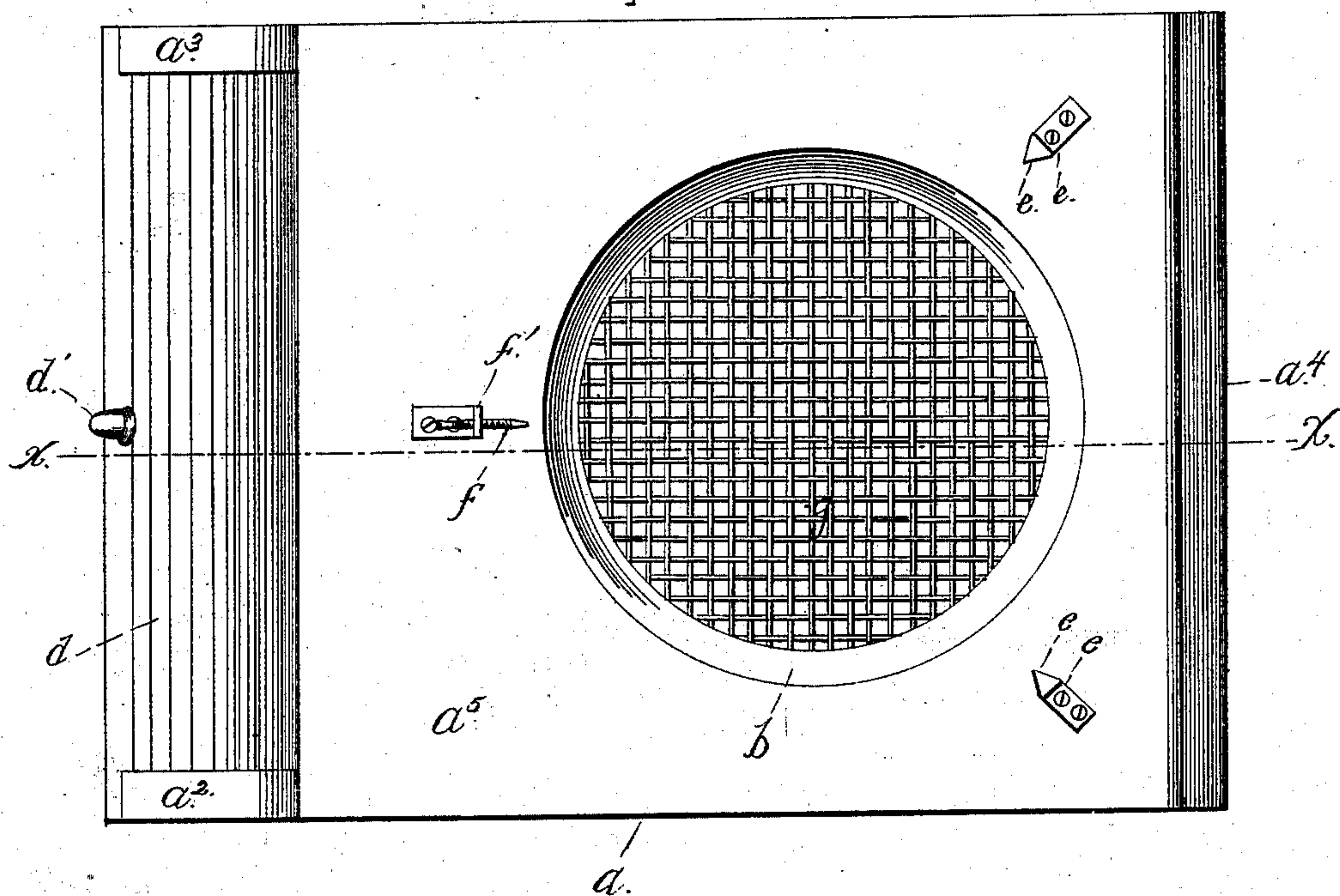
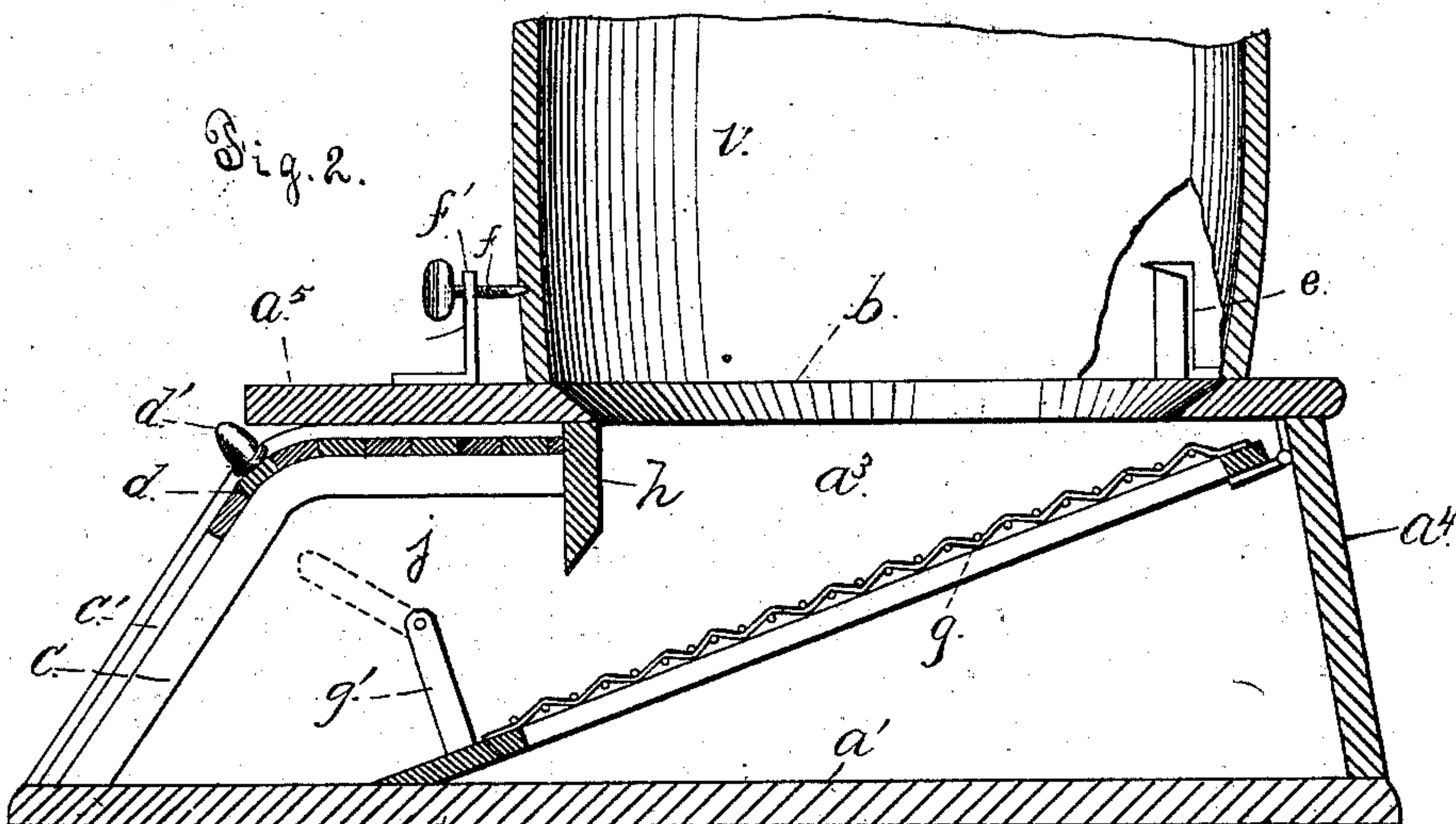


Fig. 2.



Attest.

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UNITED STATES PATENT OFFICE.

CHARLES H. NICHOLS, OF TOLEDO, OHIO, ASSIGNOR OF ONE-HALF TO MILO BASHARE, OF SAME PLACE.

CRACKER-SCREEN.

SPECIFICATION forming part of Letters Patent No. 282,465, dated July 31, 1883.

Application filed February 28, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. NICHOLS, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Cracker-Screens; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in stands for barrels, and is particularly intended as a stand for cracker-barrels, whereby the crackers are sifted as they fall from the barrel.

It has for its object to furnish a stand and a screen arranged therein, whereby the crackers will be subjected to the operation of sifting, and at the same time the whole crackers will not be liable to be broken or ground to pieces by a too rapid descent over the surface of the wire screen.

It has for a further object to furnish a screen which may be adjusted to different angles to adapt it for use for sifting very soft crackers.

My invention is a hollow casing open at its front side, provided with a door for closing said opening, having its top large enough to permit any ordinary cracker-barrel to sit uprightly thereon, and having in said top an inlet-opening, over which the barrel will sit. The inlet-opening is arranged at the rear of the top plate, and the casing is extended in front of said opening, so as to provide suitable space for the sifted crackers, and so as to provide space for the forward end of the screen. A hinged screen is provided, which has its rear end hinged within the casing just below the top board and in rear of the inlet-opening, and it has its forward end carried into the front extension and rested on the bottom board, whereby a long screening-surface is provided. There are other important parts connected with this device, all of which will be hereinafter described.

In the drawings, Figure 1 is a top view, and Fig. 2 is a longitudinal section on line x , Fig. 1.

a is the casing, composed of the base-board

a' , the side boards, a^2 a^3 , the end board, a^4 , and the top piece, a^5 . This top piece is provided with the circular opening b , made slightly smaller than the diameter of an ordinary cracker-barrel, and is arranged near the rear portion of the casing, as shown. The walls of this opening b are beveled downward, so that the crackers will readily pass through the same in the operation of the device. The front of the stand is left uncovered, to provide the discharge-opening c .

c' are grooves cut in the sides of the boards a^2 b^3 , near their upper outer edge, and carried up under the forward portion of the top board, a^5 , as shown in Fig. 2.

d is a flexible door, composed of a series of slats flexibly joined. This door slides in the grooves c' , and is provided with the knob d' , as shown. The door may be pushed up under the forward or extended portion of the top a^5 , as shown in Fig. 2, when it is desired to remove the crackers; or it may be drawn down over the opening c , as shown in Fig. 1.

On the top a^5 , and surrounding the opening b , I secure the barrel-clamping devices, consisting of the bars e e , extended vertically upward, with their upper ends, e' , pointed and inclined horizontally toward the barrel-opening, and the clamping-screw f passed through a threaded opening in a bar, f' , arranged on the opposite side of the opening b from the pointed bars e , and adapted to force and hold the barrel securely against the said points and over the opening b .

g is the screen, having its rear end suitably hinged in rear of the opening b and up close under the top a^5 , and its forward end carried forward under the opening b and rested on the base a' at a point within the extension j and about midway between the feed-opening b and the discharge-opening c , as shown in Fig. 2. The underside of the forward bar of the screen-frame is beveled, so that its point will rest close against the base a' , and no resistance will be offered to the scoop when the latter is introduced for the purpose of removing the crackers that have been screened.

g' is a button pivoted above the forward edge of the screen, and adapted to be turned to fasten the same down, as shown in Fig. 2.

h is a check-bar secured to the under side of

the top a^5 , immediately in advance of the opening b , and extended vertically downward to a point about midway between the screen and the top a^5 , as shown. The lower side of this
5 check-bar is beveled, and it is used to check the too rapid flow of the crackers, and to narrow the space between the top and the screen, so that the crackers will be subjected uniformly to the screening action, and better results will
10 be had.

i designates the barrel, which is broken away in section.

The object of my invention, it will be seen, is to furnish a barrel-stand provided with a
15 screen, and set under and supporting the barrel of crackers from which the supply is to be drawn.

In the operation of the invention the head of the barrel is removed, and it is set on the
20 stand over the opening b , and is pushed against the points e' and held by the clamping-screw f , as will be understood on reference to the drawings. It will be understood that where the crackers are contained in boxes or other
25 packages the opening b should be made of a suitable size and shape for the same. The screen g is inclined gradually, so that the crackers will pass readily down, and yet not fast enough to break or crush the same, as would
30 be the case were the incline made steep. By arranging the opening b near the rear end of the casing I provide the extension j in advance of the opening, into which the crackers pass after having been screened. By hinging the
35 screen at its rear end its forward end may be raised for the purpose of removing the fragments of crackers which have passed through the meshes of the screen in the operation of the device. The clamping devices described
40 provide a convenient means for securing the barrel or package securely on the stand, which is a convenient device for the purpose of screening the crackers, and for providing easy access

to them when it is desired to remove a quantity of them for use or sale.

In my device the forward end of the screen rests on the bottom of the casing, and the crackers pass from it onto the bottom board without any abrupt fall. The end of the screen can
50 be raised, if desired, by placing a small block under it, and thus the angle of inclination will be reduced.

I am aware that cracker-chests have been provided having screens fixed therein and extended under a part of the open top, and having an inclined chute-board for carrying the
55 crackers onto the sieve; also, that sieves have been placed under the narrow opening of a hopper in coal-screens, and that hinged doors have been used in sifting-machines, the said doors forming a funnel to receive the material poured therein through a suitable opening in the top. I do not claim, broadly, such construction; but,

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination, with the hollow casing a , having a flat top and an inlet-opening through its top plate, and having its front end open and extended, as described, of the sieve g , having its rear end hinged to the casing just below the top plate and in rear of the inlet-opening, and its front end extended below the inlet-opening and into the space in the front extension of the said casing, and placed upon the bottom
75 board and adjustable vertically, and the checking-board h , secured to the top plate just in front of the inlet-opening, and depending vertically over the forward end of the sieve, as and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES H. NICHOLS.

Witnesses:

MILO BASHARE,
GEO. MERTZ.